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AMENDMENTS TO THE CLAIMS

1. (Original) A network for transporting data from an originating port to a destination port comprising:

at least one controller, each controller including:

means for receiving data in time division multiplex (TDM) format from an originating port, and

means for mapping the TDM data into fixed-length packets, wherein the TDM data is written into a predetermined packet slot permanently assigned to the originating port; and

a switching element connected to the one or more controllers including:

means for receiving the packets from the one or more controllers, and

means for separately switching (the TDM data) in each packet slot received from the controllers into a packet slot preassigned to the destination port.

2. (Original) The network according to claim 1, further comprising a call server connected to the switching element, including:

means for determining the destination port associated with the data in each incoming packet slot based on a message transmitted from the controller to the switching element to the call server.

3. (Original) The network according to claim 2, wherein the call server further comprises means for instructing the switching elements to switch the data in the packet slot into the packet slot corresponding to the destination port.

4. (Original) A non-blocking network for transporting packet data from an originating port to a destination port, including:

at least one controller connected to plural ports, wherein each controller includes an interface to receive time division multiplex (TDM) data from an originating port and a state machine map the TDM data into packet data and to to write the TDM data into a packet slot assigned to the originating port; and

a switching element including an interface to receive the packet data from the one or more controllers and a switching circuit to switch the TDM data in the packet slot assigned to the originating port into an outgoing packet slot assigned to the destination port.

5. (Original) A network according to claim 4, further comprising a call server to determine the identity of the destination port.

6. (Original) A network according to claim 5, wherein the call server further includes a look-up table to identify the packet slot corresponding to the destination port.

7. (Original) A network according to claim 6, wherein the call server further includes an input/output controller to send a message to the switching element instructing the switching element to switch the TDM data in the packet slot assigned to the originating port into the packet slot assigned to the destination port.

8. (Original) A node controller connected to plural access controllers, including:

means for receiving packet data from the plural access controllers, and

means for separately switching each slot in the packet data received from the plural access controllers into a packet slot preassigned to the destination port.

9. (Withdrawn) A switching element connected to one or more controllers and a call server, including:

an interface to receive incoming ATM cells from the one or more controllers;

a microprocessor to receive octet switching directions from the call server on how to individually switch each octet in the incoming ATM cells into outgoing ATM cells; and

a time switch processor to switch each octet in the incoming ATM cells into outgoing ATM cells in response to the octet switching directions.

10. (Withdrawn) A switching element according to claim 9, further comprising:

a multiplexer to multiplex the incoming ATM cells into a single stream of ATM cells; and

a de-multiplexer to de-multiplex the outgoing ATM cells into plural streams of ATM cells.

11. (Withdrawn) A switching element according to claim 9, wherein the microprocessor further includes an address generator to generate read addresses in response to the octet switching directions from the call server.

12. (Withdrawn) A switching element according to claim 9, the time switch processor further comprising:

a buffer; and

a time switch controller to sequentially write each octet in the incoming ATM cells into the buffer and for reading the octets from the buffer using read addresses supplied by the microprocessor.

13. (Original) A method for establishing a switching path between an originating port and a destination port in a network having a call server and plural controllers, the method comprising the steps of:

receiving from the plural controllers packets in which TDM data from the originating port is located in a particular packet slot assigned to the originating port;

receiving a first message from the call server;

switching the TDM data in the packet slot assigned to the originating port into a packet slot assigned to the destination port in response to the first message from the call server.

14. (Original) The method of claim 13, further comprising the step of:

continuing to switch the TDM data in the packet slot assigned to the originating port into the packet slot assigned to the destination port until receipt of a second message from the call server.